Notice of Allowability	Application No.	Applicant(s)	
	09/556,279	HASHA ET AL.	
	Examiner	Art Unit	
	Khanh Dinh	2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *8/6/2004*.

2. ☒ The allowed claim(s) is/are *1-8,10,12-16,19-26,28-33,36,38-42,44,46 and 47*.

3. ☒ The drawings filed on *4/24/2000* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Joshua W. Korver (Reg. No.51,984) on 1/21/2005.

The application has been amended as follows:

IN THE CLAIMS:

Please **cancel** claims 2, 17, 18, 27 and 37.

Please **replace** claims 1, 19, 20, 21, 26, 39, 46 as follows:

-- 1. (Thrice amended) A method of implementing a network of devices connected to a shared media, the devices being a part of a consumer electronic appliance, the method comprising:

forming a logical network on the shared media, the logical network including an address space arbiter (ASA) coupled to the shared media;

discovering a device coupled to the shared medium by communication between the ASA and the device;

acquiring the discovered device, the acquired device being a member of the logical network;

receiving a message from the device over the shared media;

comparing information associated with the device included in the message to information associated with devices in an acquired device table, the

acquired device table being arranged to include information associated with devices that are members of the logical network;

adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table includes information associated with discovered but unacquired devices;

comparing elapsed time since the device last transmitted a message over the shared media to a predetermined maximum inactive time limit;

sending a message to the device;

monitoring the shared media for a valid message from the device that is responsive to the message;

removing the device from the logical network if the elapsed time exceeds the maximum inactive time limit; and

resetting the elapsed time if the device provides a valid responsive message within a predetermined time period. --

--19. (Once amended) The method of Claim [[17]] 1 wherein the device is configurable to set the maximum inactive time limit by sending a message to the ASA that includes a value for the maximum inactive time limit.--

--20. (Once amended) The method of Claim [[17]] 1 wherein the ASA includes a table that is configured to store the elapsed time and the maximum inactive time period.—

--21. (Thrice amended) A method of communication between devices on a shared media, the shared media being configurable to support communication within one or more logical networks, each logical network having a logical network ID and each device having a globally unique identifier, a logical network identifier, and a logical device identifier, the method comprising:

coupling a sending device and a receiving device on the shared media;

formatting a message for transmission on the shared media from the sending device

to the receiving device, wherein the message includes:

a source logical network ID field configurable to contain the logical network ID of the logical network of which the sending device is a member,

a source device ID field configurable to contain the logical device identifier,

a destination logical network ID field configurable to contain the logical network ID of which the receiving device is a member,

a destination device ID field configurable to contain the logical device ID of the receiving device,

a message type field configurable to contain a code indicative of information contained in the message, and a message data field configurable to contain data;

transmitting the message from the sending device to the receiving device over the shared media;

comparing the sending device's globally unique identifier, logical network identifier, and logical device identifier to those of the receiving device, the globally unique identifier, logical network identifier and logical device identifier of the sending device being stored in an acquired device table;

adding the receiving device's globally unique identifier, logical network identifier, and logical device identifier to an announced device table if the receiving device's globally unique identifier is not stored in the acquired device table and the receiving device's logical network identifier and logical device identifier indicate that the receiving device is unacquired;

comparing elapsed time since the receiving device last transmitted a message over the shared media to a predetermined maximum inactive time limit;

monitoring the shared media for a valid message from the receiving device that is responsive to the message;

removing the receiving device from the logical network if the elapsed time exceeds the maximum inactive time limit; and

resetting the elapsed time if the receiving device provides a valid responsive message within a predetermined time period.—

26. (Thrice amended) A system for supporting communication between devices connected to a shared media, the devices being a part of a consumer electronic appliance, the system comprising

a device coupled to the shared media, wherein the device is configured to send and receive messages over the shared media;

an address space arbiter (ASA) coupled to the shared media, the ASA being configurable to form a logical network with one or more devices connected to the shared media and to discover a device on the shared media by:

receiving a message from the device over the shared media;

comparing information associated with the device included in the message to information associated with devices in an acquired device table, the acquired device table being arranged to include information associated with devices that are members of the logical network; and

adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table includes information associated with discovered but unacquired devices; and

an acquisition authority (AA) at least intermittently coupled to the ASA, wherein the AA is configured to the selectively authorize the ASA to add a device to the logical network,

and wherein the AA is further configured to detect an inactive device by:

comparing an elapsed time since the device last transmitted a message over the shared media to a predetermined maximum inactive time limit

sending a message to the device,

monitoring the shared media for a valid message from the device that is responsive to the message,

removing the device from the logical network if the elapsed time exceeds the maximum inactive time limit, and

resetting the elapsed time if the device transmits a valid responsive message over the shared media within a predetermined time period,

wherein the logical network has a logical network ID, the ASA and any devices of the logical network are configured to be responsive to messages sent over the shared media that are addressed to the logical network.

--39. (Thrice amended) A computer-readable medium having computer-executable instructions for performing steps comprising:

forming a logical network on the shared media, the logical network including an address space arbiter (ASA) *coupled* to the shared media, the logical network having a logical network ID;

adding a device to the logical network;

receiving a message from the device over the shared media;

comparing information associated with the device included in the message to information associated with devices in an acquired device table, the acquired device table being arranged to include information associated with devices that are members of the logical network;

adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table includes information associated with discovered but unacquired devices;

comparing an elapsed time since the device last transmitted a message over the shared media to a predetermined maximum inactive time limit,

sending message to the device;

monitoring the shared media for a valid message from the device that is responsive to the message;

removing the device from the logical network if the elapsed time exceeds the maximum inactive time limit; and

resetting the elapsed time if the device transmits a valid *responsive* message over the shared media within a predetermined time period.--

--46. (Thrice amended) A system for implementing a network of devices connected to a shared media, the devices being part of a consumer electronic appliance, the system comprising:

means for forming a logical network on the shared media, the logical network having a logical network ID;

means for adding a *device* to the logical network;

means for receiving a message from the device *over* the shared media;

means for comparing information associated with the device included in the message to information associated with devices in an acquired device table, the acquired device table being arranged to include information associated with devices that are members of the logical network;

means for adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table includes information associated with discovered but unacquired devices;

means for comparing an elapsed time since the device last transmitted a message over the shared media to a predetermined maximum inactive time limit;

means for sending a message to the device;

means for monitoring the shared media for a valid message from the device that is responsive to the message;

means for removing the device from the logical network if the elapsed time exceeds the maximum inactive time limit; and

means for resetting the elapsed time if the device transmits a valid responsive message over the shared media within a predetermined time period.--

Allowable Subject Matter

2. Claims 1-8, 10, 12-16, 19-26, 28-33, 36, 38-42, 44, 46 and 47 are allowed.

3. The following is an examiner's statement of reasons for allowance:

None of the cited prior art discloses or teaches a method of communication between devices on a shared media, the shared media being configurable to support communication within one or more logical networks, each logical network having a logical network ID and each device having a globally unique identifier, a logical network identifier, and a logical device identifier comprising a combination of: adding information associated with the device to an announced device table if the information is not stored in the acquired device table and the device is unacquired, wherein the announced device table includes information associated with discovered but unacquired devices comparing an elapsed time since the device last transmitted a message over the shared media to a predetermined maximum inactive time limit. The invention further discloses monitoring the shared media for a valid message from the device that is responsive to the message; removing the device from the logical network if the elapsed time exceeds the maximum inactive time limit and resetting the elapsed time if the device transmits a valid responsive message over the shared media within a predetermined time period.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh Dinh whose telephone number is (571) 272-3936. The examiner can normally be reached on Monday through Friday from 8:00 A.m. to 5:00 P.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung, can be reached on (703) 272-3939. The fax phone number for this group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khanh Dinh
Patent Examiner
Art Unit 2151
1/21/2005

ZARNI MAUNG
SUPERVISORY PATENT EXAMINER